

DISASTER PREPAREDNESS -Typhoons-



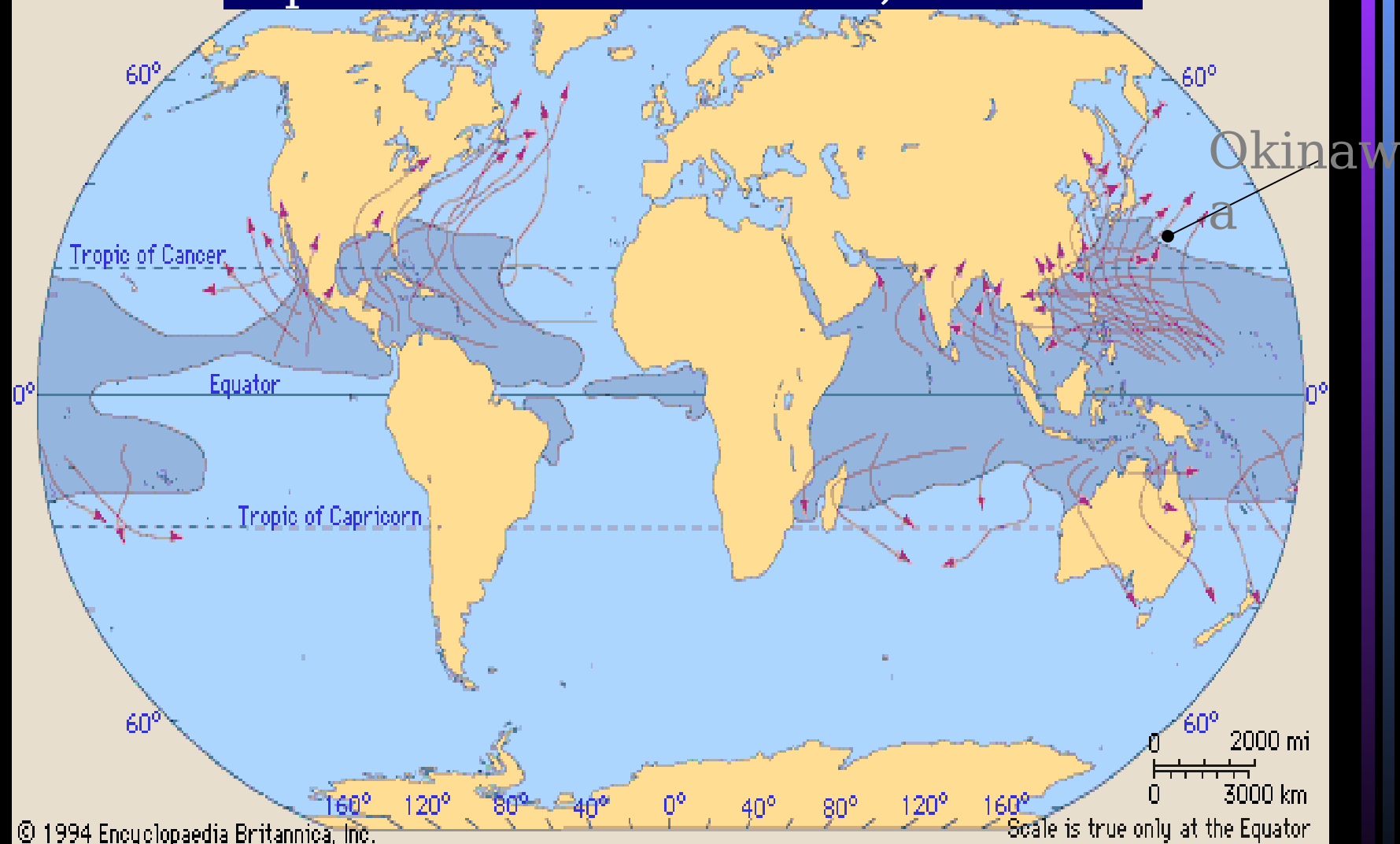
INTRODUCTION

- Typhoons:
 - pose the most common and damaging natural disaster for Okinawa.
 - are most prevalent between the periods of 1 June and 30 November, the “typhoon season,” yet typhoons may affect Okinawa any time of the year.
- All activities on Okinawa must be prepared year round to implement precautionary and reactionary measures on short notice in order to protect personnel, property, and facilities from damage and recover from damages in the most expeditious manner possible.

INTRODUCTION

- Most buildings in Japan are built to withstand typhoons.
- People die or are seriously injured every year due to typhoon related weather. Most cases are avoidable.

Comparison of storm tracks, Asia vs US.



- Areas of water with mean monthly temperatures above 27°C for at least one month of the year
- Most common tracks of hurricanes and typhoons (number of arrows indicates annual frequency of storms)

PURPOSE

- Provide information which is meant to:
 - ***PROTECT LIVES***
 - Protect property

OBJECTIVES

- Provide you with basic knowledge about:
 - tropical cyclone related terms & abbreviations: **“What does it all mean?”**
 - actions to be taken at each condition of readiness: **“What do I do?”**
 - provide emergency numbers: **“Who can I call?”**

TERMS & ABBREVIATIONS (cont.)

- TCCOR (Tropical Cyclone Condition of Readiness)
 - TCCORs are issued by the Single Service Coordinator (SSC) for all of Okinawa, which is the Commander, 18th Wing
 - correlates to specific instructions to be followed by ALL activities and sofa-status personnel
- CFAO does not issues TCCORs but may effect higher TCCOR “checklists”

TERMS & ABBREVIATIONS (cont.)

- Super Typhoons: have winds of 130 knots or more
- Destructive Winds:
 - are winds, sustained or gusts, of 50 knots or greater
 - will likely cause damages to facilities/structures
 - could cause death
- Typhoon Season: 1 June - 30 Nov

TERMS & ABBREVIATIONS (cont.)

- **TCCOR-4**: 1 June to 30 Nov but checklist is in effect year round; winds of 50 knots or greater are anticipated within 72 hours
- **TCCOR-3**: . . . within 48 hours
- **TCCOR-2**: . . . within 24 hours
- **TCCOR-1**: . . . within 12 hours
- **TCCOR-1C**: . . . within 12 hours; 34-39 knots **are** occurring



TERMS & ABBREVIATIONS (cont.)

- **TCCOR-1E: winds of 50 knots or greater are occurring**
- **TCCOR-1R: winds of 50 knots or greater are no longer occurring; however, winds of 34 - 39 knots are occurring.**
- **TCCOR-SW: winds of 50 knots or greater are not occurring; however, winds of 34 - 39 knots are occurring.**
- **TCCOR-AC: winds of 50 knots or greater are not occurring; return to TCCOR-4.**

BASIC ACTIONS

“What do I do?”

TCCOR-4

- PREPARE!
- Review checklists & ask questions
- Prepare (***see handout and CFAO checklists***)  
- Conduct/attend training
- Inventory typhoon supplies
- Identify your Typhoon Rations Custodian & know how to draw emergency rations (MREs) if required.

TCCOR-4 (cont.)

- Know the status of others. Take care of each other (i.e., who lives off base, who lives alone, status of sponsors, current medical conditions; KNOW WHO MIGHT NEED HELP)
- Issue Mission Essential Passes

TCCOR-3

- Initiate general cleanup
- Secure all loose debris; stow nonessential gear
- Check typhoon supplies (i.e., emergency rations, water, flashlights, mops, buckets, wringers, candles, batteries, sand bags, tape)
- Critical personnel may be recalled; liberty may be restricted

TCCOR-3 (cont.)

- Identify personnel requiring or desiring evacuation to base
- Identify pregnant personnel
- Fuel vehicles
- Fill water containers

TCCOR-2

- Start securing quarters/buildings
- Sandbag & tape doors
- Store water
- Recheck outside areas; store outside gear

TCCOR-2 (cont.)

- Secure GOVs
- Double check availability of emergency rations, water, flashlights, mops, buckets, wringers, radio/TV, candles, batteries, etc.
- Secure nonessential facilities

TCCOR-1

- DoD schools & day care centers close
- Nonessential personnel may be secured
- Secure & cover ADP equipment
- Evacuate applicable personnel to base quarters (i.e. for medical/personal reasons)
- Draw emergency rations for watch standers on meal cards
- Finalize all preparations for destructive winds

TCCOR-1C

- Secure all personnel to quarters, less Typhoon Watch Standers
- Cease ALL outside functions/activities except those in support of **critical** military or civil missions
- CDO & POOW are relieved by Emergency Operations Center (EOC) Watch. EOC activated.

TCCOR-1C (cont.)

- Q-Deck phones transferred to EOC
- Listen for AFN Announcement:
 - “All expectant mothers who are within 39 to 40 weeks gestation are advised to report to the US Naval Hospital, Camp Lester. Please check in at the Information Desk. You will be residing in the hospital during the emergency phase of the storm. Bring all prescription medications, personal toilet articles, a pillow, a change of clothing, at not more than \$20 for meals. If you bring a radio, it must have earphones.”

TCCOR-1E

- **ALL personnel remain indoors; do not go outdoors unless absolutely necessary (i.e., to save a life)**
- Monitor AFN radio or TV for weather updates and/or changes in TCCORs
- Report damages, flooding, injuries to the EOC (634-5023) or CFAO Q-Deck (632-7653) if there are damages, flooding, or injuries.

TCCOR-1R

- Pre-selected personnel survey damages, initiate recovery actions (**ONLY PERSONNEL WITH MISSION ESSENTIAL PASSES ARE ALLOWED OUTDOORS**)
- **ALL others remain indoors**
- Be prepared for possible recall to assist in removing hazards & assessing damages
- Report injuries/damages to EOC

TCCOR-1R (cont)

- DRF conducts preliminary recovery actions:
 - Remove debris
 - Report fires
 - Restore utilities
 - Identify damages, contamination
 - Conduct initial damage assessments
 - Submit preliminary damage report to the EOC
- Once all services have conducted recovery actions, SSC announces TCCOR-SW

TCCOR-SW

- Military personnel: report for duty within 1 hour if during normal working hours
- Civilian personnel: report within 2 hours unless 3.5 hours or less remain in the work day
- Dependants: encouraged to remain indoors
- Conduct musters
- Report injuries/damages

TCCOR-SW (cont.)

- Break down typhoon preparations
- Relieve Typhoon Watches
- Deactivate EOC; turn watch over to CDO
- Facility Managers start detailed damage assessments and submit to PWO
- Initiate damage repairs

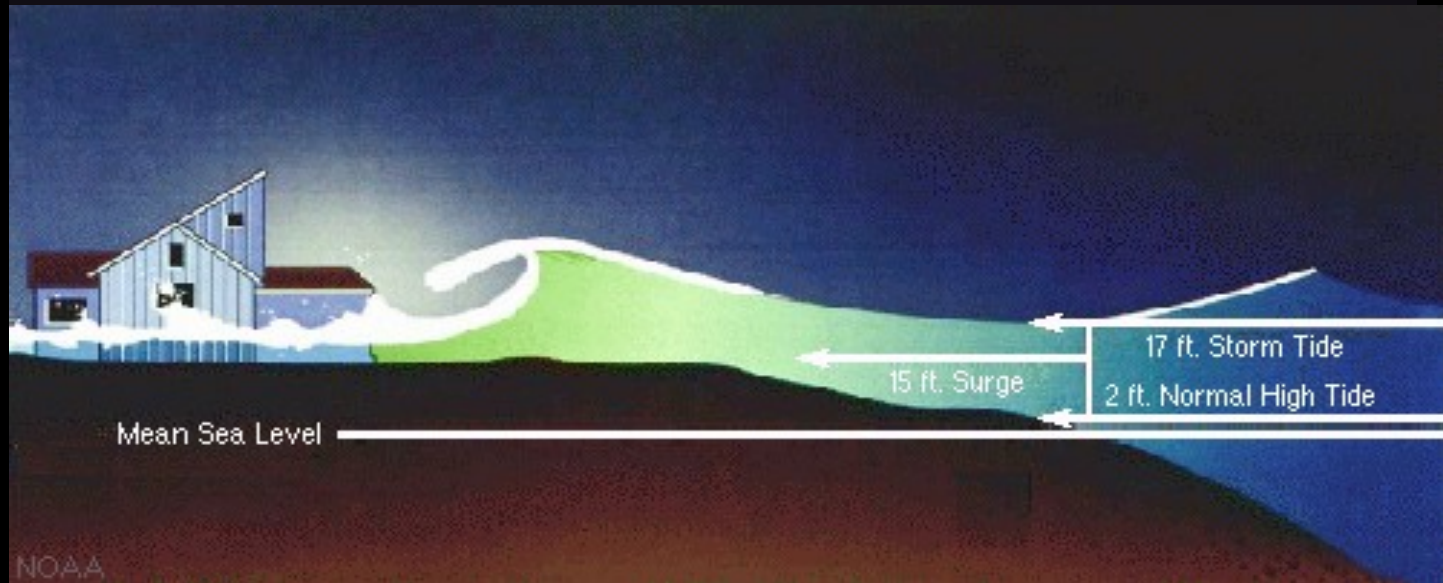
TCCOR-AC

- Safe for ALL to go outdoors.
Danger has passed; return to TCCOR-4
- Remain alert for possible damage hazards (lose power lines, tree branches, etc)

Most Conditions

- Rough water/storm tide surges
 - ***Stay away from the ocean. Sea states are unpredictable. The greatest potential for loss of life related to a typhoon is from the storm surge, which historically has claimed nine of ten victims. Do NOT sightsee, surf, or swim under TCCOR conditions.***
- High winds/gusts:
 - Flying objects
 - Falling objects (branches/wires loosened by high winds)
- Remain fit for duty in case of emergency recall

Rough water/storm tide surges



www.wildweather.com

Emergency Contacts

- On Base:
 - Fire, Security, Ambulance: 911 (White Beach: 642-2200/2300)
- Off Base:
 - Hospital Emergency Room: (098) 893-1984
 - Fire, Security, Ambulance
 - Foster: (098) 893-7911 (emergency) or 892-5111 (operator)
 - Kadena: (098) 938-1110 (emergency) or 938-1111 (operator)

Emergency Contacts

- CFAO:
 - Quarterdeck/Duty: 632-7653
 - CFAO Emergency Operations Center: 634-5023/4969/5007
- Weather Information:
 - Okinawa: 634-3879
 - <http://www.npmoc.navy.mil/jtwc.mil>
 - <http://www.kadena.af.mil/weather/weather.htm>

Typhoon Kirk - Infrared Image - 12 Aug 96/1842JST

QUESTIONS?